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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,063	03/16/2004	Dennis Gonsalves	07678/035007	5181
21559	7590	12/29/2005	EXAMINER	
CLARK & ELBING LLP			LI, BAO Q	
101 FEDERAL STREET			ART UNIT	
BOSTON, MA 02110			PAPER NUMBER	

1648

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/803,063

Applicant(s)

GONSALVES ET AL.

Examiner

Bao Qun Li

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Claims 1-63 are pending.

#### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-15, drawn to an isolated protein or polypeptide, classified in class 530, subclass 300.

**If group I invention is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- i). The isolated protein is replicase;
- ii). The isolated protein is a coat protein;
- iii). The isolated protein is a triple gene block;

**If group i) is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- A. The isolated protein comprises SEQ ID NO: 3.
- B. The isolated protein comprises SEQ ID NO: 14.
- C. The isolated protein comprises SEQ ID NO: 25.

**If group ii) is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- a). The isolated protein comprises SEQ ID NO: 11.
- b). The isolated protein comprises SEQ ID NO: 22.
- c). The isolated protein comprises SEQ ID NO: 33.

**If group iii) is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- 1). The isolated protein comprises SEQ ID NO: 5.
- 2). The isolated protein comprises SEQ ID NO: 16.
- 3). The isolated protein comprises SEQ ID NO: 27.
- 4). The isolated protein comprises SEQ ID NO: 7.

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- 5). The isolated protein comprises SEQ ID NO: 18.
- 6). The isolated protein comprises SEQ ID NO: 29.
- 7). The isolated protein comprises SEQ ID NO: 9.
- 8). The isolated protein comprises SEQ ID NO: 20.
- 9). The isolated protein comprises SEQ ID NO: 31.
- II. Claims 16-38, drawn to an isolated protein polynucleotide molecule and a host cell comprising same classified in class 536, subclass 23.72.

**If group II invention is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- i). The isolated polynucleotide encodes replicase;
- ii). The isolated polynucleotide encodes a coat protein;
- iii). The isolated polynucleotide encodes a triple gene block;

**If group i) is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- D. The isolated polynucleotide encodes a protein comprises SEQ ID NO: 3.
- E. The isolated polynucleotide encodes a protein comprises SEQ ID NO: 14.
- F. The isolated polynucleotide encodes a protein comprises SEQ ID NO: 25.

**If group ii) is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- a). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 11.
- b). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 22.
- c). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 33.

**If group iii) is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- 1). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 5.
- 2). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 16.

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- 3). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 27.
- 4). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 7.
- 5). The isolated polynucleotides encodes a protein comprises SEQ ID NO: 18.
- 6). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 29.
- 7). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 9.
- 8). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 20.
- 9). The isolated polynucleotide encodes a protein comprises SEQ ID NO: 31.

III. Claims 39-45, drawn to a transgenic vitis and method for making same, classified in class 800, subclass 296.

**If group III invention is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- i). The transgene encodes a replicase;
- ii). The transgene encodes a coat protein;
- iii). The transgene encodes a triple gene block;

IV. Claims 48-47, drawn to an antibody biding to protein or polypeptide, classified in 424, subclass 130.1.

**If group IV invention is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- i). The antibody recognizes a replicase;
- ii). The antibody recognizes a coat protein;
- iii). The antibody recognizes a triple gene block;

V. Claims 48-61, drawn to a method and a primer used for detecting a rupstirs pitting associated virus, classified in class 435, subclass 5.

**If group V is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- 1). The oligonucleotide primer is SEQ ID NO: 41.

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- 2). The oligonucleotide primer is SEQ ID NO: 42.
- 3). The oligonucleotide primer is SEQ ID NO: 43.
- 4). The oligonucleotide primer is SEQ ID NO: 44.
- 5). The oligonucleotide primer is SEQ ID NO: 45.
- 6). The oligonucleotide primer is SEQ ID NO: 46.
- 7). The oligonucleotide primer is SEQ ID NO: 47.
- 8). The oligonucleotide primer is SEQ ID NO: 48.
- 9). The oligonucleotide primer is SEQ ID NO: 49.
- 10). The oligonucleotide primer is SEQ ID NO: 50.
- 11). The oligonucleotide primer is SEQ ID NO: 51.
- 12). The oligonucleotide primer is SEQ ID NO: 52.
- 13). The oligonucleotide primer is SEQ ID NO: 53.
- 14). The oligonucleotide primer is SEQ ID NO: 54.

VI. Claims 62-63, drawn to a isolated DNA molecule, classified in 536, subclass 23.1

**If group VI invention is elected, an additional restriction to one of the follow groups of inventions are further required under 35 U.S.C. 121:**

- i). The DNA molecule is SEQ ID NO: 34;
- ii). The DNA molecule is SEQ ID NO: 35;
- iii). The DNA molecule is SEQ ID NO: 36.
- iv). The DNA molecule is SEQ ID NO: 37.
- v). The DNA molecule is SEQ ID NO: 38;
- vi). The DNA molecule is SEQ ID NO: 39;
- vii). The DNA molecule is SEQ ID NO: 40.

**The inventions are distinct, each from the other because of the following reasons:**

Inventions A to C are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different The inventions are distinct, each from the other because of the following reasons: inventions are

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directed to structurally different products. For example, the product of replicase differs from coat protein or triple gene block in structure and in function. The search for replicase does not need to search coat protein or triple block gene produce and they do not overlap each other.

Inventions i) to vii) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are directed to structurally different products. For example, the product of replicase differs from coat protein or triple gene block in structure and in function. The searching SEQ ID NO: 11 does not overlap SEQ ID NO: 22 or other sequence or vice versa.

Inventions 1 to 14 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the different inventions are directed to structurally different products. For example, the product of SEQ ID 3 differs from product of SEQ ID NO: 14 in structure and in function. The search for SEQ ID NO: 3 does not need to search SEQ ID NO: 14 or vice versa.

Inventions I to VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of using together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are directed to structurally different products. For example, the product of group I is a protein, whereas the product of group II is a polynucleotide, the product of group III is a transgenic plant. Moreover, searching protein database is different from searching polynucleotide sequence base. If searching all of them together constitutes a serious burden.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the literature and sequence searches required for one of the Groups are not required for another one of the Groups, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Qun Li whose telephone number is 571-272-0904. The examiner can normally be reached on 7:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**BAOQUN LI, MD**  
**PATENT EXAMINER**

*Bao Qun Li*  
Bao Qun Li  
12/27/2005  
✓